RAL and UK WP6 Test Bed Report

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Current EDG v1.2 Test Bed

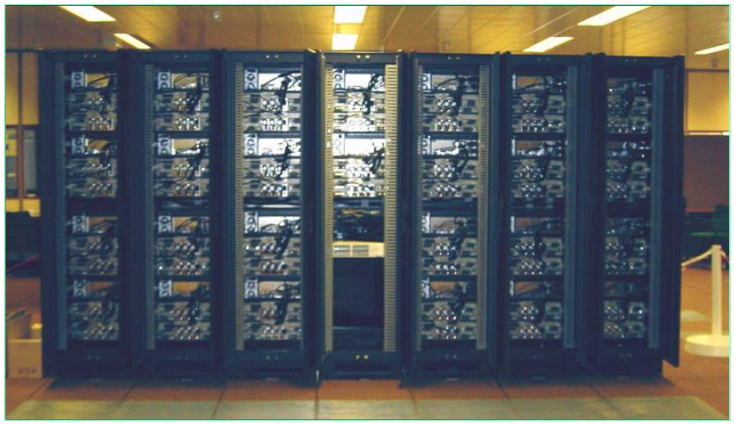
- 15 Dual 1 GHz PIII.
- 500 MB RAM
- 40 GB Disks.
- Gigabit Ethernet – Now network installed.
- Production test bed = 1 CE, 1 SE + 8 WNs.
- AFS support recently added.
- The UI is part of CSF NIS. 600 HEP accounts.
- 1 Network Monitor, 1 LCFG Server.
- A ½ TB storage element is available.
- An information catalogue for RGMA is installed for testing.
- Nodes are linked into RAL's local monitoring service.
- http://www.gridpp.ac.uk/sites/ral/

Developer's Nodes

- Five nodes used by WP3 and WP5.
- LCFG installed.
- Root access via SSH keys.
- Port Scanning Introduced.
- Improvements
  - Use AFS home directories.
  - Use sudo for logging.
  - Install virtual user mode linux machines via LCFG once RH7 is available.

Tier1a and EDG Middleware

- Tier1a , March 2002
  - 560 cpus, 50 TB disk. 80 TB tape.
- An EDG CE is LCFG installed for job submission into existing accounts. Static grid mapfile.
- Existing worker nodes appended with EDG software to the existing CSF service.



Tier1a and EDG Middleware

- EDG Job submission into personal accounts is largely untested.
- Possibly create job submission accounts.
- Use virtual LANs to allow machines to migrate from CSF to EDG testbed.
- http://www.gridpp.ac.uk/tier1a/

Testbed Configuration

- Supported VOs: alice, atlas, eo, cms, iteam, wpsix, biome, gridpp and babar.
- GDMP Configuration.
  - Now better though only supports one large pool of SEs. Different SEs for different VOs not supported.
  - Pattern matching on groups and users moves away from gridification.
  - Move towards mkgridmap for each VO? Process a directory of mkgridmap.conf files?

UK Deployment Plan of EDG

- LCFG installation is always recommended.
- Create an install procedure that does not require previous grid experience with clear and complete instructions.
- Install procedure has been tested and revised by UK WP6 sites.
- Support provided by tb-support mailing list on best effort basis and the uk grid support centre on a ticket based system.
- Formal document written by Andy McNab. http://www.gridpp.ac.uk/tb-support/rollout.html

LCFG Install Procedure

- Published at http://www.gridpp.ac.uk/tb-support/
- A modified Redhat network installation.
- A script that does almost everything.
  - Hardens Redhat 6.2
  - Sets up Apache, NTP, NFS.
  - Downloads all the RPMs
  - Checks out edg-release.
  - Installs RPMs on the server.
  - Deletes some files that are never used.
- Instructions for site-cfg.h and post LCFG instructions.
- Addition of LCFG-rpm in edg-release would improve the process.
- Looking for other testers.

UK Sites

- Manchester (Andy McNab (wp6))
  - Babar, GridPP VO servers, CE, SE and WNs
- Bristol (Owen Moroney (wp6/8))
  - Babar, GridPP RC servers, CE, SE and WNs.
- Liverpool (Mike George (wp6/4))
  - CE, SE and WNs
- UCL (Paul Mealour (wp7)) and Cambridge (Santanu Das)
  - CE, SE and WNs
- Imperial College (Dave Colling (wp1))
  - Resource Broker, CE, SE and WNs.

Common Installation Problems

- PBS. Quite obscure to set up the first time.
- WNs on a private network?
- Firewalls, inbound and outbound port ranges required by some sites.
- Final registration. Who do I tell that I exist?

User's Comments

- Most of them were good.
  - JDL is good, file existence checking is good.
  - VOs are good. Once a member a lot of resources become instantly available.
  - More resources keep appearing.
- But
  - RB still has instabilities but is a lot better.